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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,999	06/14/2007	Pasquale Spiegel	SPIEGEL-8	8951
20151 7590 12/23/2010				
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EXAMINER				
BUSHEY, CHARLES S				
ART UNIT		PAPER NUMBER		
1776				
NOTIFICATION DATE		DELIVERY MODE		
12/23/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

INFO@FEIEREISENLLC.COM

### Office Action Summary

**Application No.**

10/597,999

**Applicant(s)**

SPIEGEL, PASQUALE

**Examiner**

Scott Bushey

**Art Unit**

1776

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 1-28, 32, 35 and 37-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-31, 33, 34 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group II, claims 29-39, as well as Species C, as depicted by Figure 4, to which claims 29-31, 33, 34, and 36 are drawn in the reply filed on October 1, 2010 is acknowledged.

It is noted that applicant has stated that claims 29-34, and 36 read on the elected invention and elected species of the invention. However, it is obvious that claim 32 is drawn to a recirculation carbonator, which does not read on elected Species C (Fig. 4), since as recited by the specification, paragraph [0018], Fig. 4 is drawn to a "shock carbonator", rather than to a recirculation carbonator.

2. Claims 1-28, 32, 35, and 37-56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, or a non-elected species of the elected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on October 1, 2010.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 36 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 does not make sense as currently recited. In line 3 of the claim, a comma should be inserted after "(26)", and "fro" should be replaced by "--for--".

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malmstrom '910 taken together with either Singleterry et al or Bosko.

Malmstrom '910 (Fig. 1; page 1, lines 37-44) discloses a primary carbonation chamber (S) and a downstream secondary carbonating means (D) that is in-line between the primary carbonator and the dispensing means (d). Malmstrom '910 does not disclose that the secondary carbonation means is in the form of a so-called in-line carbonator, as known in the art.

Singleterry et al (Fig. 1; col. 2, lines 56-61) or Bosko (Fig. 2) each alternatively disclose carbonation apparati having upstream and downstream carbonation devices, wherein the downstream carbonation means in either secondary reference is in the form of an in-line carbonator. Each of the alternative secondary references provide an upstream and downstream carbonation device within a continuous flow carbonation means such that high efficiency carbonation may be realized within a continuous process which is able to produce a greater volume of uniformly carbonated product per unit of time over a batch tank type carbonation system. It would have been obvious for an artisan at the time of the invention, to modify the downstream (secondary) carbonator of Malmstrom '910 to be in the form of an in-line carbonator, in view of either

Singleterry et al or Bosko, since such would provide the optimal carbonation efficiency within a device that is capable of delivering carbonated fluids quickly and at a uniform carbonation level.

7. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over the reference combination as applied to claims 29 and 30 above, and further in view of Spiegel et al.

The reference combination as applied to claims 29 and 30 above substantially disclose applicant's invention as recited by instant claim 31, except for the in-line carbonator being filled with granulate material.

Spiegel et al (Figs. 5-8, and 11-18) disclose an in-line carbonation means including granulate material provided therein to promote vigorous mixing of the phases to provide an efficient liquid carbonation device. It would have been obvious for an artisan at the time of the invention, to modify the structure of the in-line carbonators as suggested by the reference combination as applied to claims 29 and 30 above, to have inexpensive granulate material therein, in view of Spiegel et al, since such would facilitate a highly efficient gas-liquid contact while using a low cost contact surface within the device.

8. Claims 33, 34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference combination as applied to claims 29 and 30 above, and further in view of Kazuma.

The reference combination as applied to claims 29 and 30 above substantially disclose applicant's invention as recited by instant claims 33, 34, and 36, except for the

carbonator being disposed within a shock carbonator having a cooling means for the gas-liquid mixture from the carbonator to flow through under pressure.

Kazuma (Fig. 1) disclose a shock carbonator housed within a cooling means, wherein the gas-liquid mixture from the carbonator flows through the cooling means (15) after leaving the carbonator outlet. It would have been obvious for an artisan at the time of the invention, to construct the carbonation means as suggested by the reference combination as applied to claims 29 and 30 above, in the form of a shock carbonator having a cooling means for cooling the gas-liquid mixture leaving the carbonator, in view of Kazuma, since such would provide the highest degree of gas solubility within the liquid prior to delivery to the downstream in-line carbonator, thereby facilitating the highest degree of carbonation of the product liquid.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is 571 272-1153. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott Bushey  
Primary Examiner  
Art Unit 1776

/S. B./  
12-18-10

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